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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,521	02/04/2004	Masataka Kawazoe	05453.0041	1746

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EXAMINER

MORILLO, JANEL COMBS

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/770,521

Applicant(s)

KAWAZOE, MASATAKA

Examiner

Janelle Combs-Morillo

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-11 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 020404 6) ☐ Other: _____

Art Unit: 1742

DETAILED ACTION

Claim Objections

1. Claims 1-11 are objected to because of the following informalities: claim 1 lines 5-6 mentions "unavoidable impurity elements possibly being contained". The examiner suggests changing "possibly" to "optionally". Appropriate correction is required.

Claim Interpretation

2. The examiner points out that claim 6 lines 3-4 states "a compound having an average particle size of 200 nm to 5 μ m" is met by a single compound particle having said average particle size. Likewise, "a precipitate having a particle size of no more than 100 nm", is met by any precipitate having said particle size. If applicant wishes this limitation to mean the average of all compounds and precipitates, the examiner suggests the following claim language- "compounds having an average particle size of 200 nm to 5 μ m and the average precipitate having a particle size of no more than 100 nm".

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwazaki et al (US 2003/0164207 A1) optionally in view of the admitted prior art.

Art Unit: 1742

Kashiwazaki teaches an aluminum alloy comprising (in weight%): 2-5% Mg, less than 0.8% Mn, and less than 0.35% Cr (abstract, etc.), which overlaps the alloying ranges in claims 1-4). Kashiwazaki further teaches 2 examples within the presently claimed alloying ranges: Ex. B 3.4% Mg, 0.31% Mn, 0.09% Cr, which falls within the compositional ranges of claims 1 and 4, and Ex. L which falls within the compositional ranges of claim 1.

Overlapping ranges have been held to be a prima facie case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility.

Kashiwazaki does not teach the presence of the β phase. Because Kashiwazaki teaches a substantially overlapping alloy composition, as well as a similar method of processing (by casting a billet, homogenizing, extruding, see Examples), then it is expected that substantially the same solid solution (and substantially the same absence of β phase) would form for the alloy of Kashiwazaki as for the instant invention. The examiner also points out that the instant specification teaches that the β phase is a function of composition, more specifically, the Mg content (see [0023]). Because Kashiwazaki teaches Mg within the instant ranges, then said alloys would exhibit an absence of β phase. It is held that Kashiwazaki has created a prima facie case of obviousness of the presently claimed invention.

Concerning claim 6, it is held to be within the scope of Kashiwazaki to have at least one compound particle with the instant particle size, and at least one precipitate with the instant particle size.

Art Unit: 1742

Concerning claims 7-9, though Kashiwazaki does not mention the lightness, Hv, or cold workability in terms of cold upsetting height, because Kashiwazaki teaches substantially overlapping alloying ranges, processed in a substantially similar method (as compared to the method described in the instant specification), then substantially the same lightness, Hv, and cold workability in terms of cold upsetting height are expected to occur.

The examiner asserts that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Concerning claims 10 and 11, the phrase "An aluminum alloy... is used for at least one selected from" as claimed is held to define merely an intended use for the alloy composition. Because the prior art teaches an alloy with good formability (Table 2, [0001], etc.), said alloy appears to be capable of performing said intended use as recited in the preamble. See, e.g., *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997), MPEP 2111.02.

Allowable Subject Matter

5. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1742


The closest prior art, Kashiwazaki, does not teach or suggest an Al-Mg-Mn-Cr alloy containing no compound having a particle size of greater than 5 μm , substantially as presently claimed. Kashiwazaki teaches $123\text{-}821/\text{mm}^2$ of intermetallic compounds $\geq 5 \mu\text{m}$ are typically present in similar Al-Mg-Mn-Cr alloys.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


GEORGE WYSZOMIERSKI
PRIMARY EXAMINER


JCM

May 21, 2004